

FIG. 1

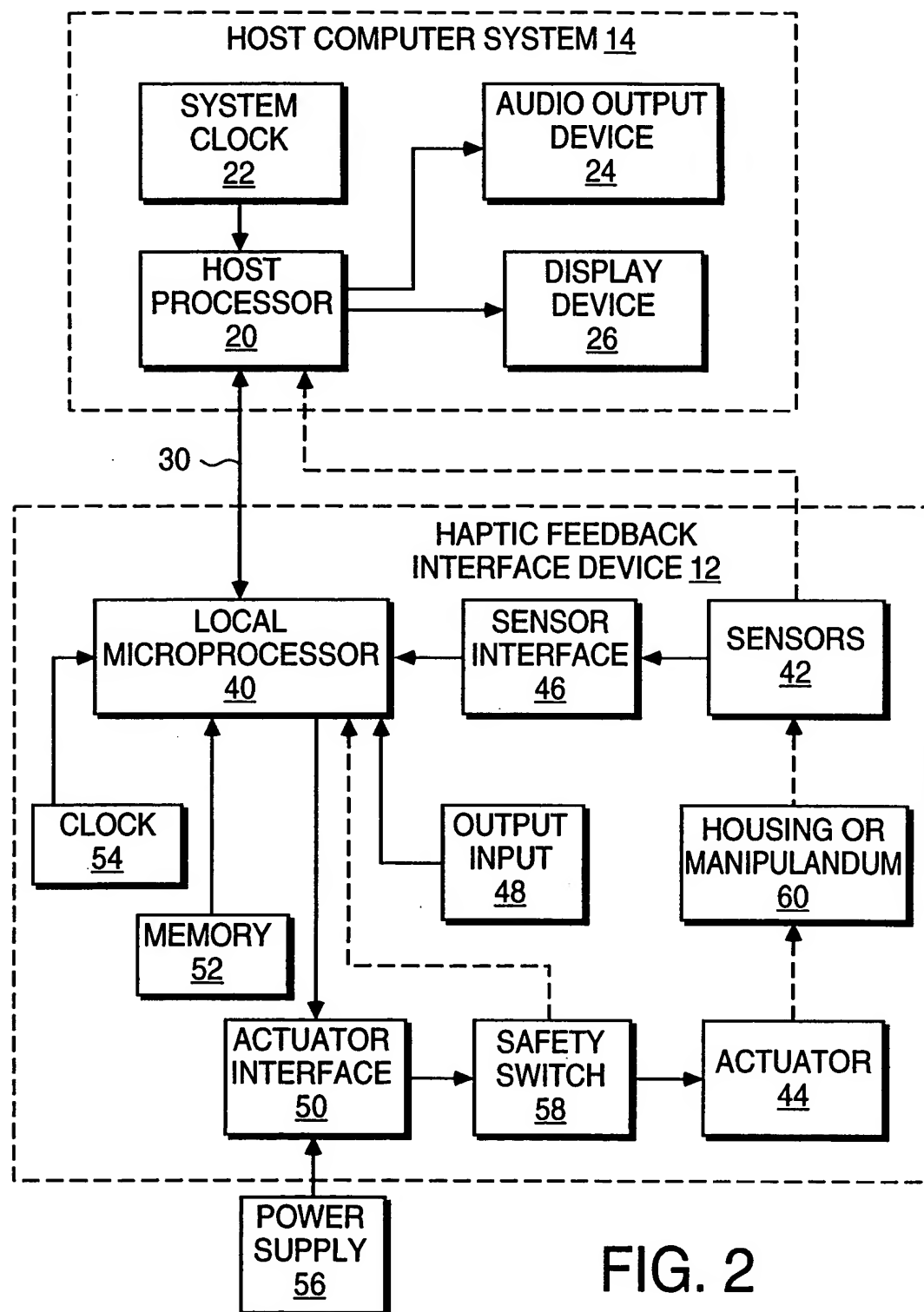


FIG. 2

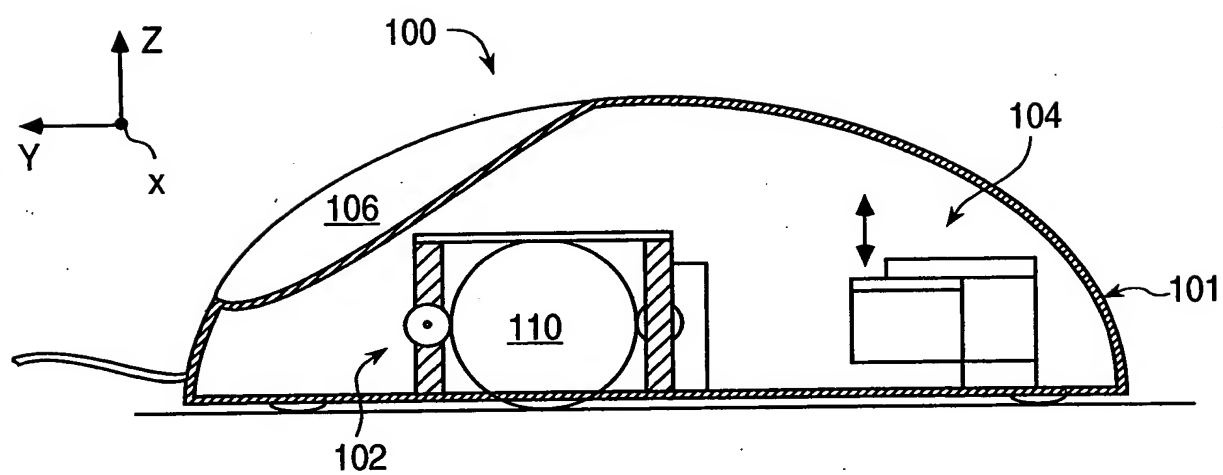


FIG. 3

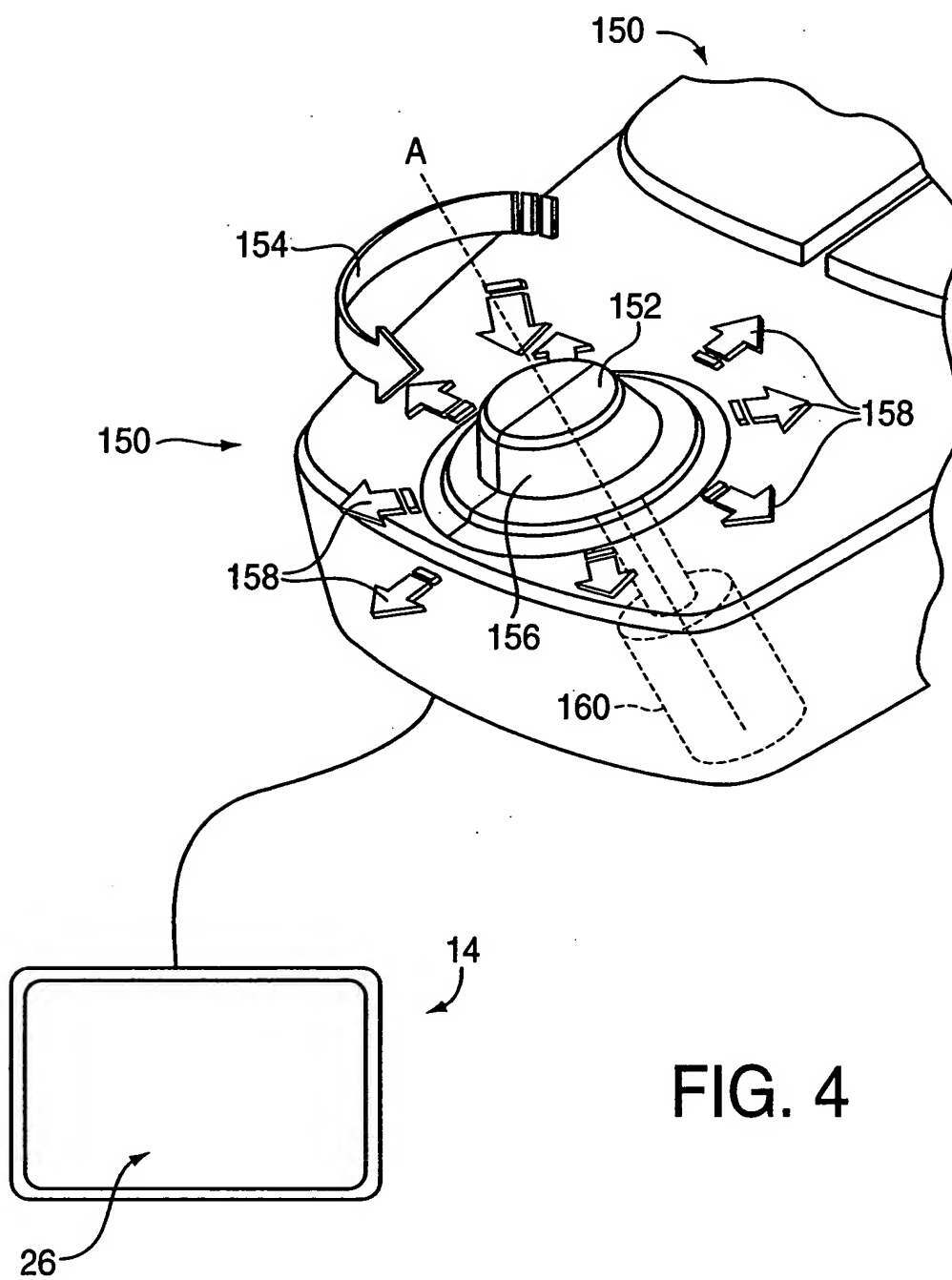
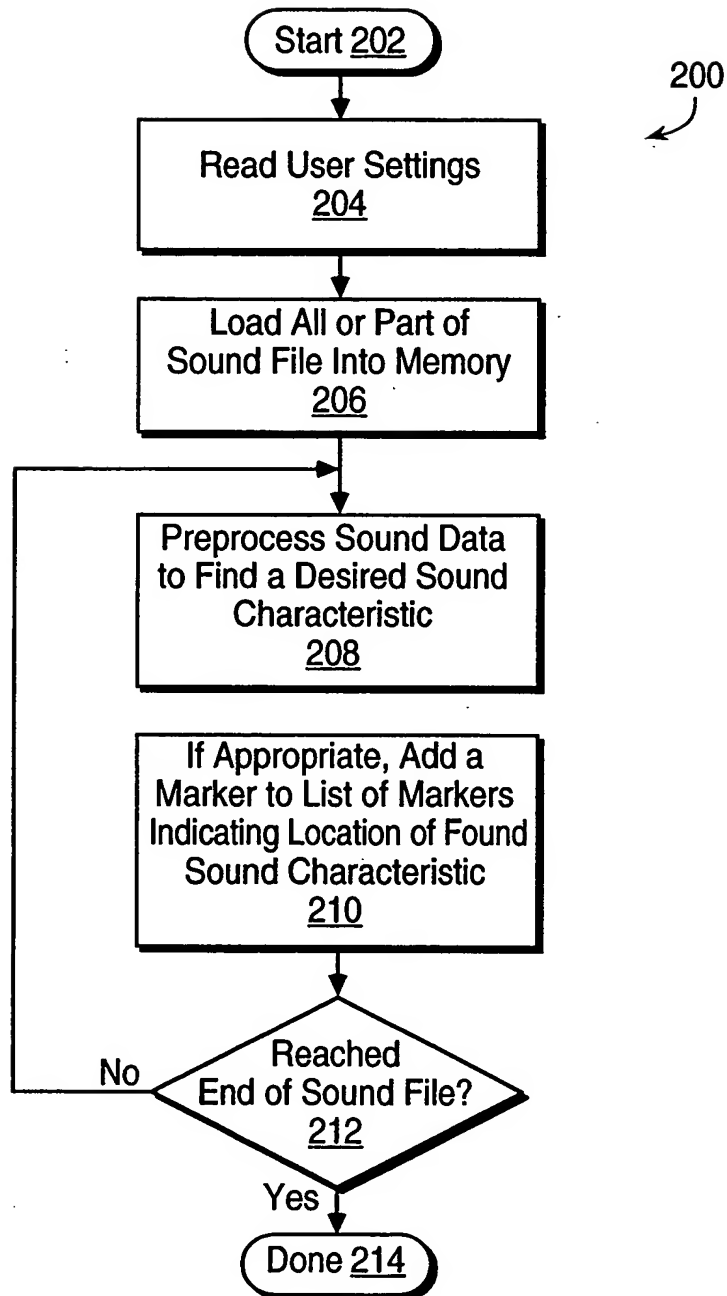


FIG. 4

FIG. 5



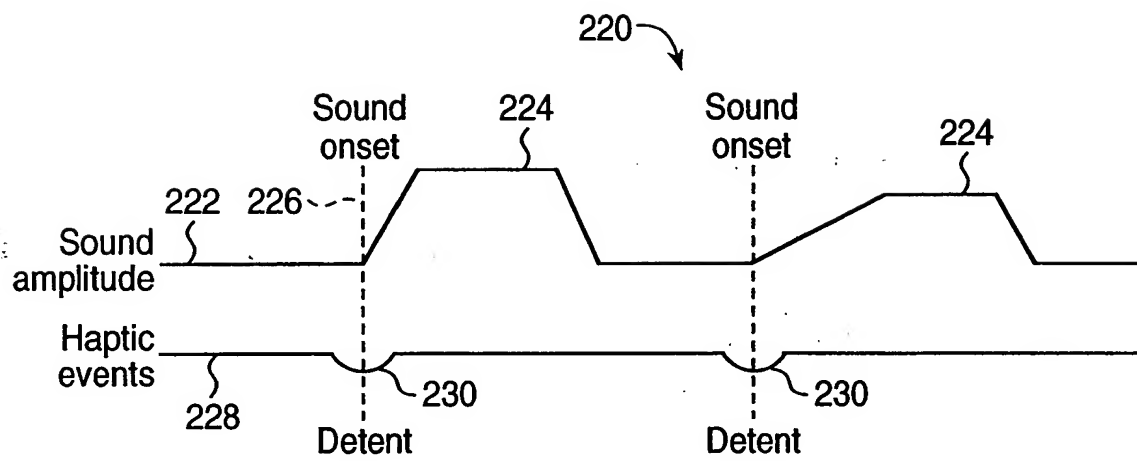


FIG. 6

FIG. 7

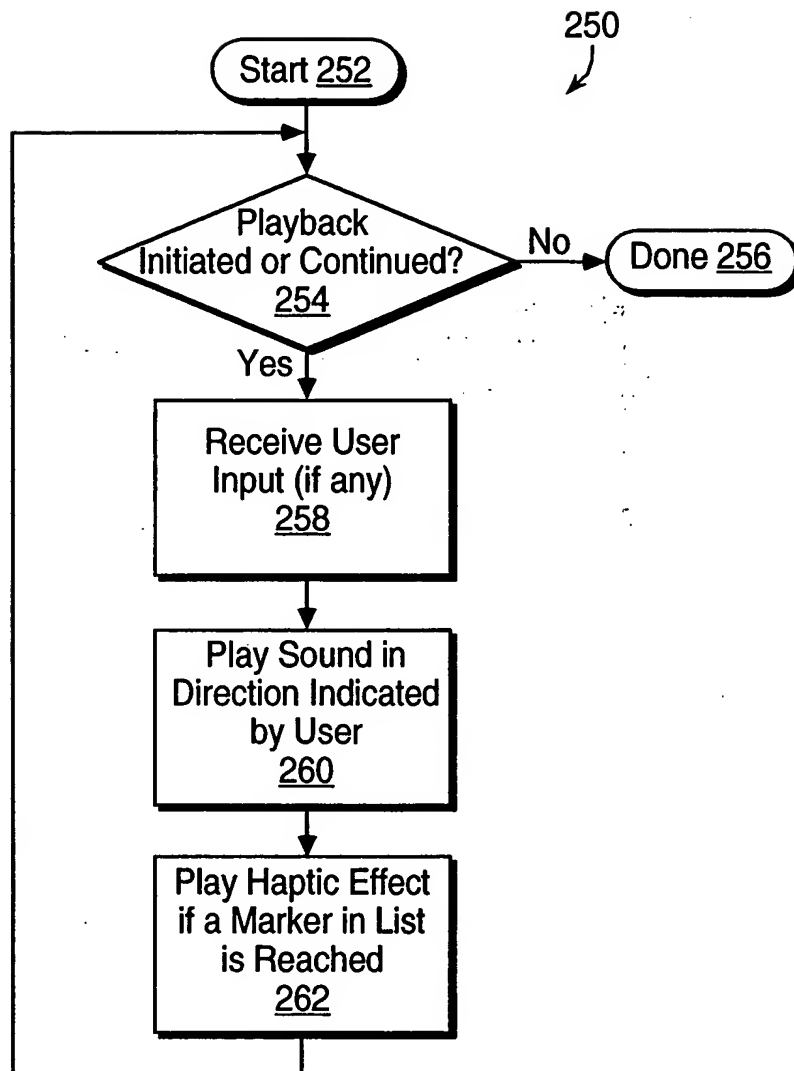
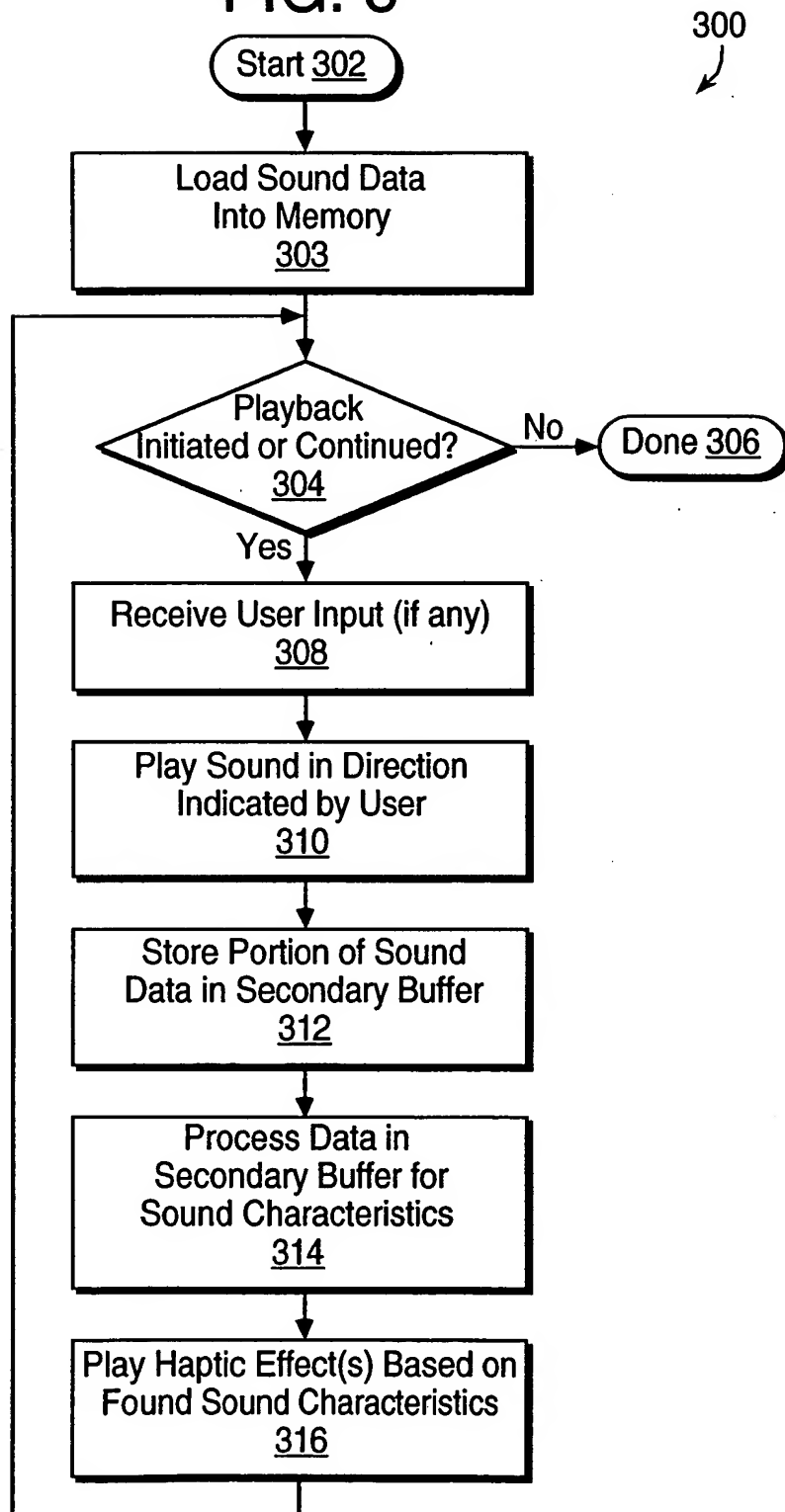


FIG. 8





9/11

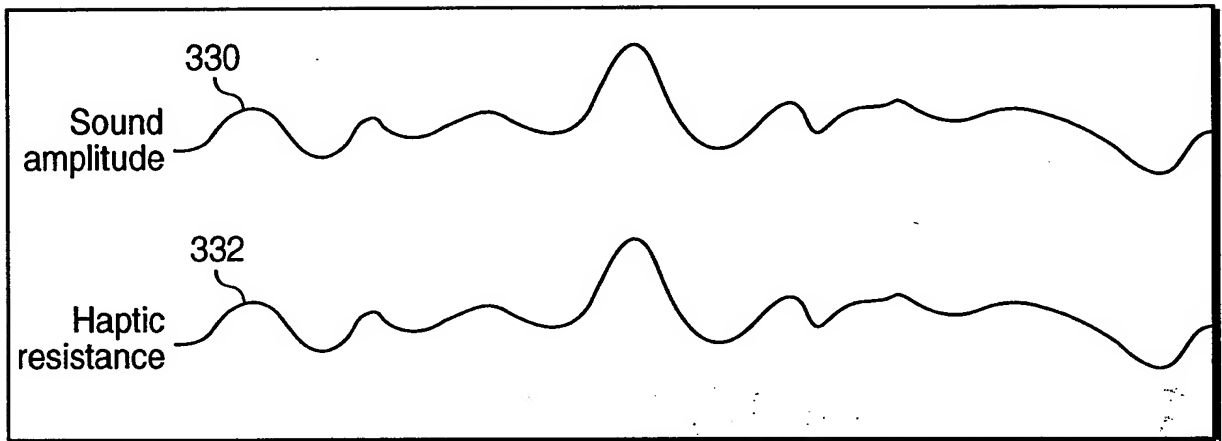


FIG. 9A

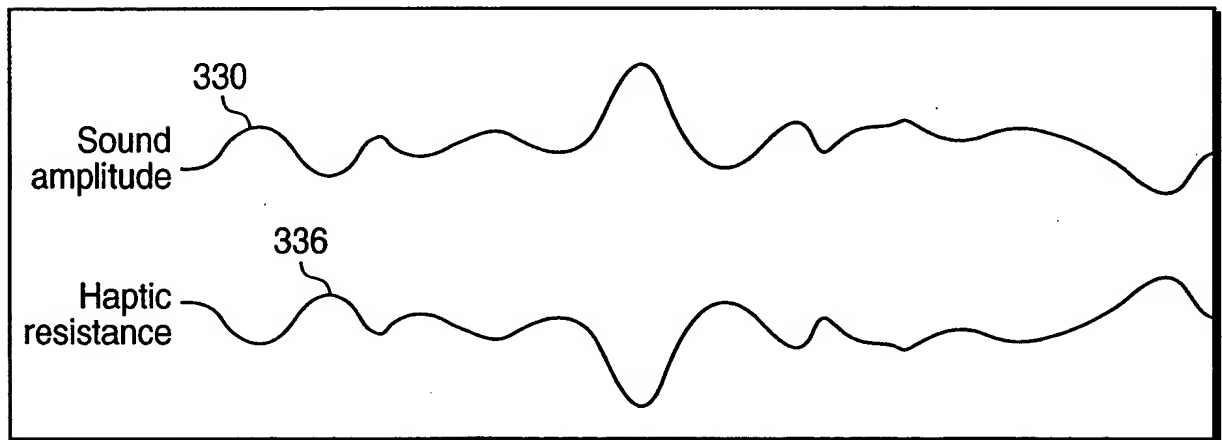


FIG. 9B

TouchSound

File Test

402

404

406

Sound File

Status

No file loaded

Frequency

100

100 Hz

Pan

0

Left

0

Low

0

High

410

Loop Sound

412

408

Play

Stop

Pause

414

Exit

420

Processing Parameters

422

Peak Thresh

50

0%

100%

426

Peak Reset

20

8%

100%

Min Beat Int. (msec)

200

20

200

Window Size (samples)

300

2

500

428

Device

430

Knob- control

position

rate

control

Fee

WFFM

Mouse Control

432

434

Scroll

436

Shuttle

438

Test

Notes

414

Debugging

0

FIG. 10

TouchSound Future

Open

Sound File

music.wav

502

Knob

iFeel

Wingman

Trackball

504

Low Pass

Cutoff

1000

Hz

High Pass

Cutoff

8000

Hz

Bandpass

Low

900

Hz

High

1250

Hz

506

Apply Filter

Harmonics Tracking

On

Off

508

Continuity

Continuous

Event-based

510

Sound Force Magnitude Mapping

Direct

Inverted

512

Waveform

514

516

FIG. 11

11/11

500